

REMARKS

This communication responds to the Office Action mailed on March 23, 2006. Claims 1, 5, 8-11, 13-14, 18, and 20-21 are amended, no claims are canceled, and no claims are added. As a result, claims 1-21 are now pending in this Application. Claims 5, 9-11, 14, and 20-21 have been amended to conform to the amendments made to claims 1, 8, 13, and 18, and not for reasons related to patentability.

§102 Rejection of the Claims

Claims 1-6, 8-11, 13-18, and 20-21 were rejected under 35 USC § 102(b) as being anticipated by Murdocca, Miles J., ("Principles of Computer Architecture," Prentice Hall, Upper Saddle River, NJ, pp. 270-273 and p. 312 (2000); hereinafter "Murdocca"). The Applicant does not admit that Murdocca is prior art and reserves the right to swear behind this reference at a later date. In addition, because the Applicant asserts that the Office has not shown that Murdocca discloses the identical invention as claimed, the Applicant traverses this rejection of the claims.

It is respectfully noted that anticipation under 35 USC § 102 requires the disclosure in a single prior art reference of each element of the claim under consideration. *See Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). It is not enough, however, that the prior art reference discloses all the claimed elements in isolation. Rather, "[a]nticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, *arranged as in the claim*." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). "The *identical invention* must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP § 2131 (emphasis added).

The Office asserts that Murdocca discloses "passing a virtual address pointer associated with the subset of the range of virtual addresses to a direct memory access module ..." on page 4

of the Office Action. However, a careful reading of Murdocca reveals this assertion to be incorrect.

The cited portion of Murdocca states “[i]n setting up the transfer, the CPU programs the DMA device with the starting address **in main memory** ...”. Murdocca, pp. 312-313 (emphasis added). This merely serves to reinforce the statement in the specification that “...DMA activity is limited to physical addresses.” Application, pg. 1, line 29. In other words, Murdocca does not disclose the use of a virtual addresses in conjunction with a DMA device.

Claims 1 and 8 (as amended) recite “... passing a virtual address pointer associated with the subset of the range of virtual addresses to a direct memory access module.” Claim 13 (as amended) recites “... a direct memory access module to receive a virtual pointer to a subset of a range of virtual addresses ...”. Claim 18 (as amended) recites “... wherein a virtual pointer associated with the subset is to be received by the direct memory access module ...”. Murdocca does not disclose any of these elements.

Therefore, since Murdocca does not teach the identical invention claimed, it is believed that independent claims 1, 8, 13, and 18 (as well as all claims depending from them) are in condition for allowance. Reconsideration and withdrawal of the rejection under § 102 is respectfully requested.

§103 Rejection of the Claims

Claim 7 was rejected under 35 USC § 103(a) as being unpatentable over Murdocca and further in view of Olarig (U.S. 6,662,272; hereinafter “Olarig”). Claim 12 was rejected under 35 USC § 103(a) as being unpatentable over Murdocca and further in view of Odom (U.S. 6,941,390; hereinafter “Odom”). Claim 19 was rejected under 35 USC § 103(a) as being unpatentable over Murdocca and further in view of Blumrich et al. (U.S. 5,659,798; hereinafter “Blumrich”). First, the Applicant does not admit that Olarig, Odom, or Blumrich are prior art, and reserves the right to swear behind these references in the future. Second, since a *prima facie* case of obviousness has not been established in each case, the Applicant respectfully traverses this rejection.

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d (BNA) 1596, 1598 (Fed. Cir. 1988). In combining prior art references to construct a *prima facie* case, the Examiner must show some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art that would lead an individual to combine the relevant teaching of the references. *Id.* The M.P.E.P. contains explicit direction to the Examiner that agrees with the *In re Fine* court:

In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant's disclosure. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d (BNA) 1438 (Fed. Cir. 1991)).

No combination of Murdocca and Olarig/Odom/Blumrich renders all of the claim limitations. As noted above, Murdocca does not teach the use of virtual memory addresses in conjunction with a DMA device. Neither does Olarig, Odom, or Blumrich. Therefore, since there is no evidence in the record that combining Murdocca and Olarig/Odom/Blumrich will result in "... passing a virtual address pointer associated with the subset of the range of virtual addresses to a direct memory access module ..." (claims 1 and 8), or "... wherein a virtual pointer associated with the subset is to be received by the direct memory access module ..." (claim 18) as claimed by the Applicant, it is respectfully requested that the rejection of claims 7, 12, and 19 under 35 U.S.C. § 103 be reconsidered and withdrawn, since any claim depending from a nonobvious independent claim is also nonobvious. See M.P.E.P. § 2143.03.

CONCLUSION

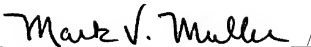
The Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone the Applicant's attorney Mark Muller at 210-308-5677 to facilitate prosecution of this Application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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